



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

VIA TELEFAX AND FIRST CLASS MAIL

OFFICE OF  
THE REGIONAL ADMINISTRATOR

December 14, 2001

Jeffrey Zelms, President  
Doe Run Resources Corporation  
Suite 300  
1801 Park 270 Drive  
St. Louis, Missouri 63146

7ES

Site:	Herculaneum
ID#	1400006266373
Break:	1.0
Other:	
12-14-01	

A717

Re: Notification of Need for Expedited Soil and Dust Cleanup and Actions to  
Prevent Releases from Transportation and Materials Handling Activities

Dear Mr. Zelms:

Results of recent analyses of soil and dust samples taken from residences near the Doe Run lead smelter in Herculaneum show extremely high levels of lead in both soils and dusts at many of the residences. The sampling and analysis results show that spillage from Doe Run's ore hauling activities, in addition to contamination from other smelter-related sources, has resulted in widespread soil and dust contamination in Herculaneum. Enclosed is a map which shows the results of the recent sampling efforts. The levels of contamination are much higher than EPA anticipated would be present at the time we entered into the Administrative Order on Consent ("Order") in May 2001. EPA has reviewed the recent sampling and analyses results and determined that the existing schedule for cleanup of residential soils, as set forth in the Order, is not protective of human health and the environment.

The schedule for soil cleanup must be substantially accelerated at properties where the contaminated soils present the highest risks to human health: (1) daycare providers with soil contamination above 400 parts per million; (2) homes where children reside who have elevated blood lead levels and soil contamination above 400 parts per million; (3) homes with resident children aged 72 months or younger and soil contamination above 400 parts per million; and (4) homes, parks, playgrounds, and schools with one or more sampling results showing lead contamination above 2500 parts per million.

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SUPERFUND RECORDS



EPA has also determined that at every home where residential yard soil replacement is performed, interior dust sampling needs to be performed shortly following completion of the cleanup. If lead is found in the interior dust at levels greater than 168 parts per million, the interior of the residence will need to be thoroughly cleaned by persons with expertise in lead abatement.

Finally, EPA is concerned that there are no enforceable, comprehensive procedures in place to prevent further releases of lead into the community as a result of Doe Run's ore concentrate handling and transportation activities.

Enclosed are draft "Work to be Performed" provisions that describe in detail the work that EPA has determined is necessary. These provisions accelerate the soil cleanup schedule for yards which present a time-critical threat, require interior dust sampling and cleanup, and require Doe Run to prepare and implement a comprehensive plan to address releases of lead due to materials handling and transportation activities. If Doe Run is interested in agreeing to perform this work, EPA proposes that these provisions be incorporated into an enforceable agreement that would provide for your performance of this work.

This work must begin without delay in order to protect the health of the citizens of Herculaneum, and in particular the health of young children in the community. If you are interested in performing this work on a consensual basis, we are willing to provide a seven day period to reach agreement on terms of an enforceable agreement. If we are unable to reach final agreement with you on terms of an enforceable agreement by December 21, 2001, EPA intends to immediately pursue other options to ensure that the cleanup work proceeds. Such actions may include, but are not limited to, issuance of an administrative order requiring performance of the work pursuant to Section 106 of CERCLA and/or Section 7003 of RCRA, seeking judicial relief compelling performance of the work by Doe Run, and/or performance of the work by EPA. Failure to comply with an administrative order issued under Section 106(a) of CERCLA may result in a fine of up to \$25,000 per day, under Section 106(b) of CERCLA, or imposition of treble damages, under Section 107(c)(3) of CERCLA. If EPA performs the work, you may be held liable under Section 107 of CERCLA for the cost of the response activities EPA performs at the site.

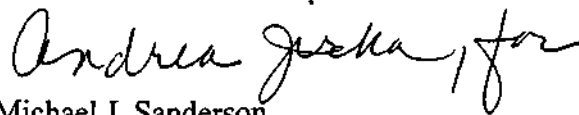
We request your prompt attention to this urgent matter. We ask that you respond by December 18 as to whether you are interested performing this work on a consensual basis. If you are interested in doing so, this will allow the parties several days to work out the exact form and terms of an enforceable agreement prior to the December 21 deadline. Please direct your response to David Cozad, Associate Regional Counsel, at (913) 551-7587. If we do not hear from you within that timeframe, we will assume you are not interested in performing this work on a consensual basis.

There are two additional issues which we want to bring to your attention. First, please be advised that at the national level, EPA is currently reviewing its response policies with respect to

lead contamination, and it is possible that EPA will revise the soil contamination action level which the Agency believes requires a time-critical response. If that happens, EPA may seek to modify the response actions at Herculaneum to conform to national policy. Second, the residential yard characterization data collected to date indicates that elevated lead in soils exists beyond the one mile radius of the facility. EPA is evaluating the residential soils data collected to date to determine if the conditions of paragraph I.A.d. of the Statement of Work, which is Appendix A of the Administrative Order on Consent, have been triggered. If EPA determines that these conditions have been triggered, EPA will notify Doe Run on whether to proceed with conducting additional soil characterization out to a 1.5 mile radius of the smelter within six months of the notification.

Thank you for your attention to this urgent matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrea J. Sanderson, for".

Michael J. Sanderson  
Director  
Superfund Division  
Environmental Protection Agency  
Region VII

Enclosures

cc: Steven Mahfood, MDNR  
Shelley Woods, MO Office of the Attorney General  
Herculaneum Lead Smelter Community Action Group  
Angela Minor, MDOH  
Denise Jordan-Izaguirre, ATSDR  
Dawn Goldsmith, U.S. Department of Justice  
Cate Tierney, EPA HQ

WORK TO BE PERFORMED

1. For the residences at which Doe Run recently conducted soil sampling pursuant to the Additional Work provision of the Administrative Order on Consent, Docket No. RCRA-7-2000-0018 and CERCLA-7-2000-0029 ("May 2001 Order"), and which also fall into one of the categories listed below, the cleanup schedule is as follows:

<u>Category</u>	<u>Time frame for soil replacement</u>
Homes with children at or under 72 months old with blood lead level in excess of 10 ug/dl and soil lead level exceeding 400 ppm	Within 30 days of being notified by EPA of location of residence
Child care providers with soil lead levels exceeding 400 ppm lead	Within 30 days of being notified by EPA of location
Homes with resident children at or under 72 months old and soil lead level exceeding 400 ppm	Within 4 months of effective date of this Order.
Homes, parks, playgrounds, and elementary schools with soil lead level exceeding 10,000 ppm	Within 6 months of effective date of this Order.
Homes, parks, playgrounds, and schools with soil lead levels between 2,500 ppm lead and 10,000 ppm lead	Within 12 months of effective date this Order.

2. EPA and Doe Run acknowledge and agree that with respect to the properties which fall into one of the categories listed above in Paragraph 1, the cleanup schedule set forth in Paragraph 1 herein requires a more expedited cleanup than the schedule contained in the May 2001 Order. EPA and Doe Run acknowledge and agree that the scheduled in Paragraph 1 herein replaces and supersedes the schedule contained in the May 2001 Order, and that compliance with the cleanup schedule contained in Paragraph 1 herein will constitute compliance with the cleanup schedule contained in the May 2001 Order.

3. All soil cleanup work performed by Doe Run pursuant to this Order shall be performed in accordance with the Community Soil Cleanup Plan as approved by EPA pursuant to the May 2001 Order.

4. This Order only changes the cleanup schedule for properties which fall into one of the categories listed above in Paragraph 1. With respect to properties where soil has not yet been sampled or where soil has been sampled and the property is not in one of the categories listed in Paragraph 1 herein, the schedule for characterization and cleanup contained in the May 2001 Order remains in effect.

5. Doe Run shall characterize interior dust contamination at all residences where soil characterization sampling has been or is in the future conducted pursuant to the May 2001 Consent Order. At each residence where Doe Run performs soil excavation and replacement pursuant to the May 2001 Consent Order, Doe Run shall perform interior dust characterization sampling within 15 days of the completion of yard soil replacement. For yards where Doe Run has completed soil excavation and removal since September 1, 2001, but prior to EPA's approval of the Interior Lead Dust Sampling and Analysis Plan, Doe Run shall perform interior dust characterization sampling within 30 days of EPA's approval of the plan. Doe Run shall develop a comprehensive Interior Lead Dust Sampling and Analysis Plan and submit it to EPA for review and approval within 15 days of the effective date of this <sup>Order</sup> Amendment. All interior dust sampling and analysis shall be conducted in accordance with the approved Interior Lead Dust Sampling and Analysis Plan. This plan shall describe in detail the sampling methods to be utilized, locations to be sampled, and numbers of samples to be collected at each residence. Interior lead dust characterization sampling shall be conducted using the ASTM D5438-93 Method or

modified version of this sampling method such as the Baltimore Repair and Maintenance Method. Analytical results from interior dust characterization sampling shall be provided to the owner of the property and to EPA within 20 days of performance of the sampling.

6. Doe Run shall perform an interior dust lead cleanup at all residences where the interior lead dust sampling required pursuant to Paragraph 5 herein shows that dust lead levels exceed 168 parts per million. Interior cleanup shall be initiated within 20 days of transmittal of interior dust sampling results to a residence. Doe Run shall work with each residence requiring indoor dust cleanup to schedule the indoor dust cleanup at a time which minimizes inconvenience for the resident. Doe Run shall develop an Interior Dust Cleanup Plan and submit it to EPA and MDNR for review and approval within 30 days of the effective date of this Order. The plan should include, but not be limited to, a detailed description of worker qualifications and credentials; cleaning equipment and methods; plans and procedures for addressing different areas within residences, such as walls, floors, carpets, attics, furniture, draperies, and ductwork; the potential for recontamination in home interiors and abatement measures to address continuing recontamination of home interiors; and cleanup confirmation sampling methods and procedures. Doe Run shall perform post- interior dust cleanup confirmation sampling in accordance with Subpart D of 40 CFR Part 745. An interior dust cleanup shall not be considered complete until indoor dust concentration wipe sample results confirm that lead dust concentrations on floors are below 40 micrograms per square foot and lead dust concentrations on interior window sills are below 250 micrograms per square foot. For each residence where Doe Run performs interior dust cleanup, Doe Run shall provide cleanup confirmation sampling results to the residence, EPA, and MDNR within 20 days of completion of the interior dust cleanup.

7. Within 30 days of the effective date of this Order, Doe Run shall submit to EPA for review and approval a Smelter Transportation and Materials Handling Plan. Such plan shall describe and explain in detail practices and procedures which Doe Run will implement and follow to eliminate the release of lead to the community as a result of Doe Run's transportation and materials handling activities. The plan shall address practices to eliminate the release of lead from vehicles transporting materials to the Doe Run smelter, from vehicle unloading activities, from vehicles leaving the facility, and any other activities related to materials handling and transportation which may result in releases of lead. The plan shall also include an expeditious schedule for implementation. Upon approval of the Smelter Transportation and Materials Handling Plan, Doe Run shall implement the plan, as approved.